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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,379	03/06/2002	Takashi Shimada	Q68419	2812

7590 12/04/2003  
Sughrue Mion  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3213

EXAMINER

SAINT SURIN, JACQUES M

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/070,379

Applicant(s)

SHIMADA ET AL.

Examiner

Jacques M Saint-Surin

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

**DETAILED ACTION**

***Response to Arguments***

1. This Office Action is responsive to the amendment of 09/12/03.

***Response to Arguments***

2. Applicant's arguments with respect to claims 14-27 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 14, 17 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al. (US Patent 5,612,495.

Regarding claim 14, Shimada et al. ('495) discloses a structure inspection apparatus (non-destructive examination device, see: Fig. 2) comprising:

a vibration unit for generating an elastic wave in a measuring object of a concrete structure (reference number 9 denotes a vibration exciter device for receiving the amplified excitation current as an output signal from the power amplifier 8 and generating an elastic wave, and vibrating the examination target 2 with the elastic wave, see: col. 5, lines 37-42);

a vibration detector adapted to be placed in contact with a surface of said measuring object (2) for detecting a component in a predetermined frequency range of an elastic vibration generated on the surface of said measuring object by said vibration unit (Fig. 2 shows response detector 3 is a sensor or an acceleration sensor, a displacement sensor, see: col. 5, lines 46-48; also in Figs. 3a and 3b it is shown that the response detector device 3 is connected to the examination targets 12a and 12b as the models to be examined by the non-destructive examination device 20, see: col. 5, lines 59-62);

a display device for displaying a maximum amplitude of an output signal of said vibration detector (the amplifier 4 amplifies the output signal transmitted from the response detector device 3 and the signal processing device 5 extracts the required examination data by processing the amplified output signal from the amplifier 4 based on the trigger signal from the excitation current detector 15, see: col. 8, lines 54-59).  
Note that signal processing device inherently includes a display device.

Regarding claim 17, Shimada et al. ('495) discloses a magnetic field is generated around the excitation coil 11; the magnetic strain is caused in the magneto striction vibrator 10 in accordance with the magnitude of the magnetic field, see: col. 38-42.

Regarding claim 26, it is a method claim that recites the steps for performing the functions of the apparatus of claim 1. In addition, Shimada et al. ('495) discloses Fig. 5 shows the response waveform of the examination target model 12b in a case where there is a circular defect 13 in the examination target model 12b; in this case, the reflected wave T2 from the circular defect 13 is apparently shown in FIG. 5; the position of the circular defect 13 from the end portion of the examination target model 12b is 29.9 cm which is calculated based on the propagation speed and the delay time of the vibration by the vibration exciter device 9, see: col. 7, lines 49-58). Furthermore, Shimada discloses the signal processing device processes the response signal from the response detector to obtain the required detection data; accordingly, the magnitude, the frequency, and the waveform of the vibration to be added to the examination target can be controlled with desired values, so that a constant magnitude force of the vibration can be added to the examination target in order to obtain a vibration excitor result with a high accuracy, see: col. 10, lines 23-30.

Regarding claims 25 and 27, Shimada et al. ('495) discloses it can be operated to drive the magneto striction vibrator 10 of in tens cm in length with a several kw by using several KHz; specifically, in this case, the vibration of an optional frequency range can be generated by changing the shape of the magneto striction vibrator 10.

5. Claims 14-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimada et al. (US Patent 6,591,681).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Claims 14-27 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. The applied reference has a common inventor with the instant application and are claiming the same subject matter. Applicant did not mention or refer to the application 10/111,168 now US Patent 6,591,681 in the present application.


### ***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Art Unit: 2856

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

  
Jacques M. Saint-Surin  
November 28, 2003

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800